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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,291	07/18/2000	Gopal S. Krishna	95-320	8015

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EXAMINER

DONAGHUE, LARRY D

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,291

Applicant(s)

KRISHNA, GOPAL S.

Examiner

Larry D Donaghue

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-12, and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1, 3-12 and 14-17 are presented for examination.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, and 12 rejected under 35 U.S.C. 102(e) as being anticipated by Fawaz et al., U.S. Patent App. Pub. 2003/0133406 A1.

Regarding claim 1, Fawaz et al. anticipates the claimed invention by disclosing a method comprising: First determining a priority for a data frame received on a network switch port (pars. 51-53 SLA as priority); Second determining a depletion of network switch resources (pars. 78-79; Fig. 10); Selectively outputting a flow control frame on the network switch port based on the determined depletion of network switch resources relative to the determined priority (pars. 78-79; Fig. 10) and wherein the first determining step includes determining the priority for the data frame at the network switch port (pars. 51-53).

Regarding claim 3, Fawaz et al. teaches a method further comprising storing the determined priority within a table configured for storing the determined priority for each of a plurality of the network switch ports (Fig. 6 elem. 318).

Regarding claims 12-13 and 18, they are apparatus claims corresponding to method claims 1-2, respectively. Since they do not teach or define above the information in the corresponding method claim, they are rejected under the same basis.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 4-11 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fawaz et al., U.S. Patent App. Pub. 2003/0133406 A1 as applied to claims 1,3 and 12, supra.

Regarding claim 4, Fawaz et al. teaches the invention substantially as claimed. See the rejection of claim 3 above. Fawaz et al. does not explicitly teach a method in which the second determining step includes determining whether an availability of the network switch resources falls below a first prescribed threshold value. Rather, Fawaz et al. teaches method which operates on the basis of the number of occupied buffers (par. 78, "occupancy ... exceeds some threshold H"). When the number of occupied buffers is greater than a certain amount, Fawaz et al. initiates congestion control. In any system, the total number of buffers is equal to the number of occupied buffers plus the number of available buffers. Given this fact, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Fawaz et al. to operate on the basis of buffer availability as opposed to buffer occupancy based on simple mathematical reasoning. In the modified method, the second determining step would determine whether an availability of the network switch resources falls below a first prescribed threshold value.

Regarding claim 5, Fawaz et al. teaches a method further comprising setting the first prescribed threshold value based on a user-defined priority threshold (par. 57 H).

Regarding claim 6, Fawaz et al. teaches a method where the setting step includes setting a plurality of prescribed threshold values, including the first prescribed threshold value, based on a plurality of user-defined priority thresholds, respectively (par. 57 H is 21 SLA specific).

Regarding claim 7, Fawaz et al. teaches a method wherein: The first determining step includes determining the priority from a plurality of available priority values (Fig. 6 elem. 318 showing multiple SLAs); The second determining step includes determining whether the availability of the network resources has fallen below an identified one of the prescribed threshold values (see the reasons for rejection of claim 4); The selectively outputting step includes identifying from the table the network switch ports having respective priority values less than the corresponding user-defined priority threshold for the identified one prescribed threshold value (par. 57).

Regarding claim 8, Fawaz et al. teaches a method wherein the step of setting the plurality of prescribed threshold values includes storing the prescribed threshold values and the respective user-defined priority thresholds in a second table (par. 57).

Regarding claim 9, Fawaz et al. does not explicitly teach a method further comprising deleting the determined priority from the table after a prescribed aging interval. Official notice is hereby taken of the fact that aging table entries is a known technique for eliminating no longer used entries. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Fawaz et al. to include the step of

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deleting the determined priority from the table after a prescribed aging interval because it would allow the system to handle the situation where an SLA was not properly shut down.

Regarding claim 10, it introduces the same limitations as claim 6, so it is rejected for the same reasons.

Regarding claim 11, it introduces the same limitations as claim 7, so it is rejected for the same reasons.

Regarding claims 14-17, they are apparatus claims corresponding to method claims 4-5, 7, and 9, respectively. Since they do not teach or define above the information in the corresponding method claim, they are rejected under the same basis.

6. Applicant's arguments filed 11/18/2004 have been fully considered but they are not persuasive.

7. Applicant argues "Fawaz describes in Figure 6 (and Figure 8) that the data packets that are received by the input buffers 302 (402) are passed to the classifier 304(404), which classifies each packet in accordance with an SLA (see, e.g., Paragraph 51, 69). Hence, Fawaz describes that the classification of packets is performed centrally by the classifier 304 (404). Independent claims 1 and 12, however, specify that each network switch port includes a port filter, and that the port filter determines the priority value for the corresponding packet received by the network switch port. Fawaz provides no disclosure or suggestion of performing classification in each network switch port, as claimed."

8. In Response

The teaching referenced does not disclose a centralized Classifier as alleged by applicant, note the teaching is directed to each network switch port 106, 102 as shown by figure 1.

Further note applicant specification set forth that "As described below, the determination of whether a data packet is designated as high priority traffic is programmable by a user. Although the determination of a priority for the data frame received on a given network switch port 24 could be determined centrally by the flow module 30, the disclosed embodiment performs distributed packet classification in each of the network switch ports 20."

Therefore the instant specification set forth that the two methods are equivalent.

9. This is a RCE of applicant's earlier Application No. 09/618,291. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D Donaghue whose telephone number is 571-272-3962. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LARRY D. DONAGHUE
PRIMARY EXAMINER

